



Fig. 1.—A centipede feeding on the sawfly larva, south-west of Pemberton, W.A. — Photograph by M. Peterson.

Upon disturbance by the bright light of the flash, the centipede lifted the larva about 5mm off the ground. It then carried it backwards for a distance of about 8cm, before dropping the larva at the onslaught of another flash of light. The centipede then retreated under a log. Examination of the sawfly larva by this time showed that it was dead, either by the action of the venom or by a combination of the envenomation and its fall.

Centipedes are mainly nocturnal arthropods, resting by day in leaf litter, in the soil, under stones, loose bark or logs, and in crevices and emerge at night to roam over the surface of the ground or climb trees and walls in search of their prey. The prey are immobilized by the injection of poison by the poison claws. It is generally known that centipedes prey on small invertebrates, and some giant scolopendrid species from South Africa are known to attack and feed on vertebrates such as lizards and frogs.

In this journal, Shugg (*West. Aust. Nat.*, 8, 1961: 52) records a large, unidentified centipede attacking, killing and feeding on a mouse (*Mus musculus*). However, there appear to be no other Australian papers on the prey of centipedes.

The Australian species are poorly known, both in their general biology and taxonomy. Therefore, we find it of interest to record these observations.

— T.J. HAWKESWOOD and M PETERSON

**First record of Golden Bronze Cuckoo in Kimberley.** — The Golden Bronze Cuckoo *Chrysococcyx lucidus plagosus* breeds in south-western Australia and winters in the Lesser Sunda Islands but there are few records of it from areas it traverses enroute. Serventy and Whittell (*Birds of Western Australia*, 5th edn., 1976) give only five records from the northern part of Western Australia: Landor Station (breeding in April), Mileura Station (calling in June), Carnarvon (single specimens in May and August) and near Roebourne (specimen in July). On 17 April 1977 Johnstone collected an immature being fed by a pair of Mangrove Warblers *Gerygone levigaster* in a

*Melaleuca acacioides* thicket at Cape Berthelot. It was initially identified and registered as a Little Bronze Cuckoo *Chrysococcyx minutillus* but was subsequently re-identified independently by Mr S.A. Parker (S.A. Museum) and us as *plagosus*.

Immature bronze-cuckoos are difficult to identify, especially in the field. Both *plagosus* and *minutillus* have black and white bars all along the outer rectrix but in *minutillus* the white bars are partly rufous. The crown and upper back in *plagosus* is more greyish, less greenish, than in *minutillus*. The wing of the specimen from Cape Berthelot (97 and 99 mm) is longer than for *minutillus* from the Kimberley (range 89-96 mm).

It seems strange that the specimen was being fed by Mangrove Warblers because this suggests that it was fledged in the Kimberley though young cuckoos uttering persistent begging calls sometimes stimulate birds other than their fosters to feed them. However a migrant individual would perhaps not solicit. The Mangrove Warbler is a common host of the Little Bronze Cuckoo in the Kimberley.

— JULIAN FORD and R.E. JOHNSTONE

**Moths and caterpillars on *Chenopodium* at Perry Lakes.** — On April 20, 1980 a junior naturalists excursion was held at Perry Lakes (31°56'S, 115°46'E), a freshwater lake 7.5 km west of Perth on the Swan Coastal Plain. It was decided to investigate the exposed sand banks on the western edge of the lake caused by the considerable drop in water level due to the successive drought years. The sandbanks carried an almost pure stand of *Chenopodium macrospermum* with some *Cyperus tenuiflorus*. Amongst these plants seedlings of Flooded Gum (*Eucalyptus rudis*) and Tamarisk (*Tamarix aphylla*) had established themselves.

*Chenopodium macrospermum* Hook. f. (Chenopodiaceae) is an introduced plant native to South America. In Western Australia it had been previously recorded from Lake Waneragup (15km SSE Bunbury) and Lake Bibra (16 km SSW Perth). *C. macrospermum* has a notable history as it was first collected by no less a naturalist than Charles Darwin during his voyage on HMS *Beagle*. It was subsequently collected and scientifically named by the eminent British botanist Joseph Hooker (later Director of the Royal Botanic Gardens, Kew, England) in his *The Botany — The Antarctic Voyage of HM Discovery Ships Erebus and Terror in the years 1839-1843*. Hooker also recorded *C. macrospermum* as somewhat of a culinary delight:

"This very distinct species has been used as a pot-herb by the colonists of the Falkland Islands, and was described to me as excellent".

We did not have time to sample the plant's "culinary delights" but we did note that it was being heavily eaten by a species of caterpillar and that large swarms of a small silver moth and a small black spider resided amongst its foliage. Specimens of the moths, caterpillars and spiders were collected for identification.

The moth specimens were forwarded to Dr I.F.B. Common of the C.S.I.R.O. Division of Entomology who kindly provided the following reply:

"The specimens that were so abundant in the stand of *Chenopodium macrospermum* are *Hymenla recurvalis* (Fabricius), family Pyralidae, a widespread species in Australia and the Pacific Islands, but also from Africa, and India to China. It is also recorded from America. I have records in Australia of the larvae on *Amaranthus*, *Celosia* and *Trianthema portulacastrum*, and it is a pest of beetroot (foliage) and silver beet, when it is known as the beet webworm. Zimmerman in *Insects of Hawaii*, vol. 8 records the food plants as *Alternanthera sessilis*, amarantaceous weeds, *Batis maritima*, beets, chard, chenopodiaceous weeds, Chinese spinach, coxcomb, *Euxolus*, New Zealand spinach, *Nototrichium*, *Portulaca*, *Sesuvium portulacastrum* and spinach. There seems to be no doubt therefore that your specimens were using *Chenopodium* as a food plant".

The caterpillars were brought back to the laboratory along with samples of the *Chenopodium*. When collected the larvae varied in size from 2-3 cm and their colour ranged from green, cream, brown or black with black half-moon or